NAGAR PALIK NIGAM BHILAI NIT

कार्य का नाम :- मूलभूत सुविधा अंतर्गत वार्ड क्र. 25 जवाहर नगर एम.आई.जी. एवं ई.डब्ल्यू.एस. उद्यान का संधारण एवं रंगरोगन कार्य।

AS PER BUILDING S.O.R 01.01.2015 & Electric S.O.R. 01.06.2020

Supply of bot dipped galvanized (in single dip to minimum 75 micron) octogonal pole made of 3mm thick steel grade in 2-350 sheet having window and flush cover with locking arrangement at suitable height from base for cable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following in minimum specifications with 4 way terminal connector including 4mm thick anchor plate, 4 nos 24mm dia foundation bots of ENB grade, and as per IS 2002 & BS EN: 10025. (designed for wind speed upto 180m/hr, Is: 875 Part 3) 9 metre high, dia 155mm at bottom and 90mm at 100, base plate size 260x260x f6mm, foundation botts 750mm long Erection of steel tubular or rail pole in cement concrete 1:3:6 graded stone aggregate 40mm nominal size foundation including exeavation and refilling etc., as required of length: 7 metre to 10 metre Supply and fixing water tight terminal box made of 1.6mm thick M S Sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 2nos 4 way connector and 1No, SPMCB inside the box for cable connection, fixed to pole with 2 nos. clamp mad from 40X3mm M.S. lat with 2 Nos. ant bott dully painted with 2 coat of red oxide paint and 2 coats adminitum paint complete as required 30X20X15 cms. Supply and laying following sizes one number PVC insulated, PVC sheathed steel armored, aluminium conductor power cable of 1.1KV grade in existing RCC/ HUME/ STONEWARE/ METAL nine as required -4X 16a, mm Supplying of following 230x250 volts LED Flood light flitting with all Acessories like driver, heats fix made of dic cast aluminium with IP 6 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 5Yrs Warrarnyt certificate from manufacturer .P.F. should be greater than 0.9 LED chip efficacy rain > 12010mens/wata 300wat Providing and placing in position angle iron and sturt of required size i/e bottom to be split and ber a		AS PER BUILDING S.O.R 01.01.2015 & Electric S.O.R. 01.06.2020		T
Supply of hot dipped galvanized (in single dip to minimum 75 micron) octogonal pole made of 3mm thick steel grade E-350 sheet having window and flush cover with locking arrangement at suitable height from base for eable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following minimum specifications with 4 way terminal connector including amm thick anchor plate, 4 nos 24mm dia foundation botts of EN8 grade, and as per IS 2062 & BS EN: 10025. (designed for wind speed upto 180km/hr, IS: 875 Part 3) 9 metre high, dia 155mm at bottom and 90mm at top, base plate size 260x260x16mm, foundation botts 750mm long Erection of steel tubular or rail pole in cement concrete 1:3:6 graded stone aggregate 40mm nominal size foundation including exeavation and refilling etc. as required of length: 7metre to 10 metre Supply and fixing water tight terminal box made of 1.6mm thick M S Sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 20x0 4 way connector and INo, SPMCB inside the box for cable connection, fixed to pole with 2 nos. claim pand from 40x3mm M.S. lat with 2 Nos. nat bott dully painted with 2 coat of red oxide paint and 2 coats aluminium paint complete as required 30x20x15 cms. Supply and laying following sizes one number PVC insulated, PVC sheathed steel armored, aluminium conductor power cable of 1.1KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required; 4X 16sq.mm Supplying of following 230x290 volts LED Flood light flitting with all Acessories like driver, heats ink made of die cast aluminium with IP 66 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 57% Warranty certificate from manufacturer.P.F. should be greater than 0.9 LED chip efficacy and 3 painting and placing in position angle iron and sturt of required size i/c bottom to be split and bent at right angle in opposite directi	NO.	PARTICULAR	QTY	UNI
2 nominal size foundation including excavation and refilling etc. as required of length: 7metre to 10 metre Supply and fixing water tight terminal box made of 1.6mm thick M S Sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 2nos 4 way connector and 1No, SPMCB inside the box for cable connection, fixed to pole with 2 nos. clamp mad from 40x3mm M.S. lat with 2 Nos. nut bolt dully painted with 2 coat of red oxide paint and 2 coats aluminium paint complete as required 30x20x15 cms. Supply and laying following sizes one number PVC insulated, PVC sheathed steel armored, aluminium conductor power cable of 1.1kV grade in existing RCC/ HUME/ STONEWARE/ METAL pine as required : 4X 16sa,mm Supplying of following 230250 volts LED Flood light fitting with all Acessories like driver, heats ink made of die cast aluminium with IP 66 protection and 10kV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 57yrs Warranty certificate from manufacturer .P.F. should be greater than 0.9.LED chip efficacy ratio > 1.20lumens/ward 300wat Providing and placing in position angle iron and sturt of required size i/c bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as as per requirement l/c priming coat with red oxide zinc chromate primer and placing the post/strut in cement concrete block> Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in deptt/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). 8 Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). 9 Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all work	1	Supply of hot dipped galvanized (in single dip to minimum 75 micron) octogonal pole made of 3mm thick steel grade E-350 sheet having window and flush cover with locking arrangement at suitable height from base for cable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following minimum specifications with 4 way terminal connector including 4mm thick anchor plate, 4 nos 24mm dia foundation bolts of EN8 grade, and as per IS 2062 & BS EN: 10025. (designed for wind speed upto 180km/hr, IS: 875 Part 3) 9 metre high, dia 155mm at bottom and 90mm at	1	Nos
Supply and fixing water tight terminal box made of 1.6mm thick M S Sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 2nos 4 way connector and 1No, SPMCB inside the box for cable connection, fixed to pole with 2 nos. clamp mad from 40X3mm M.S. lat with 2 Nos. nut bolt dully painted with 2 coat of red oxide paint and 2 coats aluminium paint complete as required 30X20X15 cms. Supply and laying following sizes one number PVC insulated, PVC sheathed steel armored, aluminium conductor power cable of 1.1KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required: 4X 156a.mm Supplying of following 230/250 volts LED Flood light fitting with all Acessories like driver, heats ink made of die cast aluminium with IP 66 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 5Yrs Warranty certificate from manufacturer .P.F. should be greater than 0.9.LED chip efficacy ratio > 120lumens/watt 300wat Providing and placing in position angle iron and sturt of required size i/e bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as per requirement i/e priming coat with red oxide zinc chromate primer and placing the post/strut in cement concrete block> Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of nits. In all types of soil Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. L	2	nominal size foundation including excavation and refilling etc. as required of length: 7metre to	1	No
aluminium conductor power cable of 1.1KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required: 4X 16sq.mm Supplying of following 230/250 volts LED Flood light fitting with all Acessories like driver, heats ink made of die cast aluminium with IP 66 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 5Yrs Warranty certificate from manufacturer .P.F. should be greater than 0.9.LED chip efficacy ratio > 120lumens/watt 300wat Providing and placing in position angle iron and sturt of required size i/c bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as per requirement i/c priming coat with red oxide zinc chromate primer and placing the post/strut in cement concrete block> 5urface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1248 (1 cement 14 coarse sand : 8 graded stone aggregate 40mm nominal size). Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers including dressing etc. complete.	3	Supply and fixing water tight terminal box made of 1.6mm thick M S Sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 2nos 4 way connector and 1No, SPMCB inside the box for cable connection, fixed to pole with 2 nos. clamp mad from 40X3mm M.S. lat with 2 Nos. nut bolt dully painted with 2 coat of red oxide	1	No
Supplying of following 230/250 volts LED Flood light fitting with all Acessories like driver, heats ink made of die cast aluminium with IP 6 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 5Yrs Warranty certificate from manufacturer .P.F. should be greater than 0.9.LED chip efficacy ratio > 1201umens/watt 300wat Providing and placing in position angle iron and sturt of required size i/e bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as per requirement i/e priming coat with red oxide zinc chromate primer and placing the post/strut in cement concrete block> Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. In all types of soil 38.40 Cu Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 14.8 (1 cement : 4 coarse sand : 8 graded stone aggregate (Fal.G Bricks) confirming to 18:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers including dressing etc. complete.	4	aluminium conductor power cable of 1.1KV grade in existing RCC/ HUME/ STONEWARE/	100.00	Mt
Providing and placing in position angle iron and sturt of required size i/c bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as per requirement i/c priming coat with red oxide zinc chromate primer and placing the post/strut in cement concrete block> Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 124.8 (1 cement; 4 coarse sand; 8 praded stone aggregate 40mm nominal size). Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	5	Supplying of following 230/250 volts LED Flood light fitting with all Acessories like driver, heats ink made of die cast aluminium with IP 66 protection and 10KV surge protection on pole bracket, including connection, earthing etc complete as per specification and furnishing 5Yrs Warranty certificate from manufacturer .P.F. should be greater than 0.9.LED chip efficacy	4.00	No
Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. In all types of soil Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 124.8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). Brick work with modular fly-ash lime bricks (Fal.G Bricks) confirming to 18:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	6	Providing and placing in position angle iron and sturt of required size i/c bottom to be split and bent at right angle in opposite direction for required length and drilling holes up to 10 mm dia as per requirement i/c priming coat with red oxide zinc chromate primer and placing the post/strut		
in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area). 160.00 Sq		The content content and the content of the content	357.00	kg
Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). Brick work with modular fly-ash lime bricks (Fal.G Bricks) confirming to 1S:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	7	in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the		
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Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size). Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement: 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	8	including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.		
Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to 18:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.				
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Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to 18:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand) Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	9	concrete mixer in all works upto plinth level excluding cost of form work.		
Class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	_		4.80	Cun
not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.		Class designation 4.0 in foundation and plinth in:		
including dressing etc. complete.	-	Providing and filling in plieds with the P.G.	12.80	Cun
48.00 Cun		1. Indexceeding 200m in depth consolidating each deposited layer by rapping and watering		
	L		48.00	Cum

12	Providing & laying 60mm thick precast interlocking concrete blocks of approved size (approx 305 sqcm) and shape/ pattern, over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping andsweeping etc. complete of minimum compressive strength of 250 kg/sq.cm		
	Pigment Coloured (rubber mould) precast interlock concrete blocks	160.00	Sqm
13	Providing and making 12mm thick cement plaster of mix: In Cement Mortar 1:5 (1 cement : 5		
	fine sand)	32.00	Sqm
14	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer. In gratings, frames,		94
	guard bar, ladder, railings, brackets, gates and similar works.	11.52	
	(0.11.0)	691.20	kg
	60 KG per sqm		
15	Painting on new work (two or more coats) to give an even shade with. Aluminium paint.	100.00	cam
		100.00	sqm
16	Painting new exterior surface (two or more coats) with PREMIUM TEXTURED paint asfinish including cleaning washing of surface etc. complete with:On new work (Two or more coats)	-	
	- Cours /	48.00	sqm
17	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete. Aperture 50x50mm		
		36.00	sqm
18	Providing and planting following herbs in garden including preparation of soil, base plantation, providing and spreading different fertiliers, soil and sand:	-	
	Hedges like Alife, Dorenta, Tikoma etc	100.00	each

ASSTT.ENGINEER

SUB ENGINEER

Nagar Palik Nigam, Bhilai

Nagar Palik Nigam, Bhilai